WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, I. R. TANNEHILL in charge]

NORTH ATLANTIC OCEAN, SEPTEMBER 1939

By H. C. HUNTER

Atmospheric pressure.—Available reports from the eastern part of the North Atlantic for September are much smaller in number than usual. The information at hand indicates that the pressure over the northeastern North Atlantic averaged greater than normal. It was slightly greater than normal over the southwestern portion, but near the Azores Islands pressure was considerably less than normal, while from southern Greenland southwestward to the waters just east of the Carolinas there was a moderate deficiency.

The extremes of pressure found in vessel reports at hand were 1,034.5 and 989.5 millibars (30.55 and 29.22 inches.) The higher reading was noted within a few miles of Nantucket, on the morning of the 19th, by the American steamship *W. C. Teagle*. Table 1 shows that two land stations, Nantucket on that day and Lerwick on the 18th, recorded slightly higher pressures. The lower reading was recorded near 51° N., 23° W., shortly before noon of the 4th, by the American steamship *Schoharie*. Julianehaab had somewhat lower pressure on the 18th, also Belle Isle on the 17th.

Cyclones and gales.—The month was comparatively quiet over the North Atlantic. Three mail reports have been received of strong gales (force 9), but no report has come of any higher wind. From the 5th to the 16th there was particularly little storm activity, and after the 20th there again was very little over the main North Atlantic.

Disturbance over Gulf of Mexico.—Elsewhere in this REVIEW is an account of an unimportant disturbance noted during the latter part of the month. This moved northward over the central Gulf of Mexico and crossed the Louisiana coastline. Chart XIII presents the conditions on the 25th, and the track of the center of the disturbance.

Fog.—There was nearly everywhere less fog than during the August preceding. The decrease in frequency was marked over waters near New England and Nova Scotia and over almost all portions of the Grand Banks region. However, an increase in fog occurrence was noted near 50° N., 30° W., where the second week of the month was marked by much fog; also near the United States coast from Sandy Hook to Hatteras there was a slight increase.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, September 1939*

Station	Average pressure	Departure	Highest	Date	Lowest	Date
	Millibars	*Millibars*	*Millibars*		*Millibars*	
Julianehaab, Greenland [1]	1,005.9	−1.9	1,026	23	981	18
Lerwick, Shetland Islands						
Valencia, Ireland						
Horta, Azores	1,016.4	−5.3	1,024	11,12	1,006	25
Belle Isle, Newfoundland [1]	1,010.4	−1.8	1,024	18	982	17
Halifax, Nova Scotia	1,016.0	−1.6	1,033	19	1,001	8
Nantucket	1,017.3	−1.3	1,035	19	1,003	8
Hatteras	1,016.8	−1.2	1,027	19	1,009	10
Turks Island	1,015.3	+0.1	1,018	6,7,9	1,010	20
Key West	1,014.9	+1.0	1,021	8	1,008	21
New Orleans	1,015.6	+0.4	1,021	8	1,005	26

[1] For 26 days.

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

This month the greatest number of foggy days was once more, as in August, noted in the 5° square 40° to 45° N., 65° to 70° W., where the count was 9, most of these occurring during either the first or the final weeks. There was no part of the Grand Banks region where reports show that more than 5 days had fog. Farther eastward, the square 45° to 50° N., 30° to 35° W., had fog on the 7 days, 8th to 14th, inclusive, but no days otherwise.

Compared with other years, there was practically everywhere less than average fogginess in September this year from the vicinity of Cape Cod eastward and northeastward almost to midocean.

The American steamship *Brazos* and the tug *Relief* collided during the dense fog on the 30th near Sandy Hook, and made port somewhat damaged.

OCEAN GALES AND STORMS, SEPTEMBER 1939

Vessel	Voyage		Position at time of lowest barometer		Gale began September	Time of lowest barometer, September	Gale ended September	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN			° ′	° ′				*Millibars*					
Italia, Nor. M. S.	Port Arthur	Amsterdam	45 06 N.	38 00 W.	[1] 31	9a, 1	1	1,009.4	W	NNW, 8	NW	NNW, 8	
President Harding, Am. S. S.	New York	Cobh	44 18 N.	44 42 W.	3	8a, 3	3	994.6	NE	NE, 9	N	NE, 9	E-NNE.
Aquarius, Am. S. S.	Corpus Christi	Liverpool	46 00 N.	38 30 W.	3	6p, 3	4	999.0	SSE	NNE, 9	N	NNE, 9	SSE-NNE.
West Ira, Am. S. S.	Barbados	Rio de Janeiro	6 50 N.	47 43 W.	7	Mdt, 7	8	1,012.9	ENE	ENE, 6	SE	ENE, 6	SE-ENE-SE.
Arundo, Du, S. S.	Rotterdam	Baltimore	46 03 N.	40 54 W.	10	Noon, 10	10	[2] 1,003.9		S, 8		S, 8	
Scanyork, Am. S. S.	Copenhagen	New York	57 54 N.	26 48 W.	11	10a, 11	11	1,008.1	S	S, 8	WSW	S, 8	S-SW.
Wacosta, Am. S. S.	Glasgow	do	[3] 44 15 N.	57 53 W.	18	4a, 17	18	1,001.0	NW	WSW, 6	NE	N, 9	SW-WSW-SW.
American Merchant Am. S. S.	London	do	48 36 N.	48 42 W.	17	9a, 17	17	996.6		S, 8		S, 8	
Colytto, Du. S. S.	Swansea	Baltimore	51 18 N.	34 24 W.	20	10a, 20	20	1,002.2		SE, 8		SE, 8	
Aztec, Am. S. S.	Minatitlan	Tuxpam	18 42 N.	94 30 W.	22	6p, 22	24	1,008.8		WNW, 8	WNW	WNW, 8	
Jean Lafitte, Am. S. S.	Glasgow	New York	49 00 N.	40 36 W.	25	4p, 25	26	999.7	SE	WNW, 8	WNW	WNW, 8	SE-WNW.
Roanoke, Am. S. S.	Savannah	Port Arthur	27 54 N.	89 00 W.		6a, 26		1,010.2		SSW, 7		SSW, 7	SSW-SW.
NORTH PACIFIC OCEAN													
Nankai Maru, Jap. M. S.	Yokohama	Los Angeles	41 25 N.	138 35 W.	[1] 31	4a, 1	1	1,027.8	NNE	NNE, 8	NNE	NNE, 8	
Guide, U. S. C. & G. S.	Dutch Harbor to near.	Unimak Island	54 36 N.	164 42 W.	2	1a, 2	2	1,011.9	S	SW, 2	W	SW, 8	SW-S-W.
La Placentia, Am. S. S.	Los Angeles	Vancouver, B. C.	41 30 N.	124 45 W.	2	6p, 2	2	1,013.9	NNW	NNW, 8	NNW	NNW, 8	None.
Anniston City, Am. S. S.	Balboa	Honolulu	21 12 N.	150 12 W.	3	2p, 3	4	1,015.9		N, 7	NE	N, 7	

See footnotes at end of table.

OCEAN GALES AND STORMS, SEPTEMBER 1939—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began September	Time of lowest barometer, September	Gale ended September	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH PACIFIC OCEAN—Continued			° ′	° ′				*Millibars*					
Makaweli, Am. S. S.	Hilo, T. H.	San Francisco	22 34 N.	151 13 W.	3	4p, 3	4	1,015.9	ENE.	E, 9	ENE.	E, 9	ENE-ESE.
Potter, Am. M. S.	Los Angeles	Balboa	16 59 N.	101 47 W.	5	3a, 6	6	1,008.5	ESE.	E, 8	ESE.	E, 8	
San Gabriel, Am. S. S.	do	do	17 59 N.	103 26 W.	6	5p, 6	7	1,005.4	E.	E, 8	SE.	E, 9	
Charles H. Cramp, Am. S. S.	do	do	13 55 N.	95 00 W.	7	5p, 7	7	1,004.4	NE.	SE, 8	SSE.	SE, 9	E-SSE.
Potter, Am. M. S.	do	do	13 58 N.	95 24 W.	7	9p, 7	7	1,004.1	ENE.	SE, 9	S.	SE, 9	E-SE.
Panaman, Am. S. S.	do	do	19 18 N.	106 11 W.	7	6a, 7	8	1,001.4	NE.	E, 12	E.	E, 12	NE-E.
Kainalu, Am. S. S.	do	do	18 32 N.	107 15 W.	7	11a, 7	8	995.6	N.	WNW, 12	S.	WNW, 12	N-SW.
Vega, U. S. N.	San Diego	do	14 12 N.	93 55 W.	7	6p, 7	8	1,008.8	S.	S, 7	S.	S, 7	
Horace Luckenbach, Am. S. S.	Balboa	Los Angeles	20 59 N.	107 51 W.	7	11p, 7	8	989.2	ESE.	E, 12	SSE.	E, 12	E-SSE.
West Cactus, Am. S. S.	do	do	21 53 N.	109 53 W.	7	5a, 8	8	986.1	N.	NW, 12	SW.	NW, 12	NE-NW-SW.
Point Judith, Am. S. S.	do	do	[2] 21 21 N.	108 50 W.	7	2a, 8	8	[2] 948.2	ENE.	Var. 4	SW.	NNE, 12	NNE-WSW.
Losmar, Am. S. S.	Los Angeles	Balboa	22 40 N.	110 10 W.	8	1p, 8		958.3	NE.	—, 12		—, 12	
Horace Luckenbach, Am. S. S.	Balboa	Los Angeles	23 48 N.	111 55 W.	8	9p, 8	9	986.1	S.	SE, 12	SE.	SE, 12	ESE-SE.
Minnesotan, Am. S. S.	do	do	23 50 N.	111 55 W.	7	10p, 8	9	982.4	ESE.	SE, 12	S.	SE, 12	ESE-S.
J. L. Luckenbach, Am. S. S.	Los Angeles	Balboa	24 00 N.	112 30 W.	8	—a, 9	9					Shifting, 11	
San Gabriel, Am. S. S.	do	do	15 45 N.	97 48 W.	8	2a, 9	9	1,010.5	E.	E, 9	SE.	E, 9	E-ESE.
Maui, Am. S. S.	do	do	25 24 N.	113 35 W.	9	Noon, 9	9	1,003.1	NNE.	SE, 8	SE.	SE, 8	NNE-SE.
Hamakua, Am. S. S.	do	do	27 00 N.	114 36 W.	9	4p, 9	10	1,006.8	ESE.	ESE, 2	E.	ESE, 8	
Texas, Am. S. S.	do	Yokohama	46 00 N.	176 52 E.	8	2a, 10	11	993.9	NE.	SSW, 9	NW.	SSW, 10	SSW-WSW.
Guide, U. S. C. & G. S.	Dutch Harbor near.	Unimak Island.	55 06 N.	164 42 W.	10	10a, 11	11	1,017.3	S.	S, 8	S.	SE, 8	S-SSW-SE.
Discoverer, U. S. C. & G. S.	On survey work near.	Aleutian Islands.	54 30 N.	162 36 W.	14	Noon, 14.	15	1,012.5	NW.	NW, 7	NW.	NW, 10	W-NW.
Vermont, Am. S. S.	Los Angeles	Balboa	22 57 N.	118 18 W.	13	4a, 14	14	1,007.5	NW.	WSW, 8	SW.	W, 8	WNW-SW.
Henry S. Grove, Am. S. S.	do	do	[3] 13 37 N.	94 24 W.	14	8a, 15	15	1,008.1	SE.	NE, 6	ESE.	NE, 7	NE-E.
Hamakua, Am. S. S.	do	do	[3] 14 14 N.	94 29 W.	15	4p, 16	17	1,006.8	NE.	ESE, 7	E.	E, 7	ENE-SE.
City of Los Angeles, Am. S. S.	do	do	15 08 N.	96 33 W.	17	2p, 17	17	1,007.1	ESE.	ENE, —.	SE.	ESE, 7	
Manoeran, Du. M. S.	San Francisco	do	17 25 N.	106 20 W.	18	4p, 19	20	1,007.2	NW.	ESE, 5	W.	E, 7	ENE-ESE.
Besholt, Nor. M. S.	Los Angeles	do	18 00 N.	113 36 W.	20	11p, 20	21	983.9	NE.	NNW, 9	S.	NNW, 10	NE-NNW.
Canton, Swed. M. S.	Manila	San Francisco	41 08 N.	149 35 W.	20	7a, 20	20	980.5	SW.	E, 10	SW.	SE, 11	SW-E-SE.
Kansai Maru, Jap. M. S.	Yokohama	Los Angeles	[3] 46 43 N.	166 09 W.	22	6a, 23	23	977.3	NW.	SSE, 7	SSW.	N, 8	SE-SSW.
Chirikof, Am. S. S.	Chignik, Alaska.	San Francisco	55 32 N.	156 18 W.	23	6p, 23	23	993.2	ENE.	E, 7	E.	E, 9	E-SE.
Discoverer, U. S. C. & G. S.	On survey work near.	Aleutian Islands.	[3] 54 44 N.	162 56 W.	23	4p, 23	23	987.5	ENE.	E, 8	E.	E, 11	E-SE.
Leonard Wood, U. S. A. T.	Balboa	San Francisco	31 48 N.	118 48 W.	24	4p, 24	24	1,001.4		S, 8		S, 8	
San Clemente Maru, Jap. M. S.	Los Angeles	Yokohama	38 45 N.	145 00 E.	23	2a, 24	24	984.1	ENE.	NE, 6	NW.	NW, 8	ENE-NNW.
Bengal Maru, Jap. S. S.	do	Balboa	32 55 N.	117 45 W.	24	5a, 25	25	[2] 993.2	SSE.	SE, 9	SW.	SE, 9	SE-SSW.
Akiura Maru, Jap. M. S.	Kamchatka	Los Angeles	50 44 N.	160 00 E.	24	4p, 25	26	990.2	ENE.	NNE, 8	NNW.	NNE, 8	ENE-N.
Sawokla, Am. S. S.	Masinloc, P. I.	do	42 40 N.	172 25 E.	25	Mdt, 25	26	999.3	SSW.	SW, 7	WNW.	W, 8	SSW-WSW.
Sanyo Maru, Jap. M. S.	Yokohama	San Francisco	45 33 N.	167 17 E.	24	Mdt, 25	26	991.9	SSE.	WSW, 8	NW.	WNW, 9	WSW-WNW.
Kiyo Maru, Jap. M. S.	Nagaroki	Los Angeles	[3] 46 29 N.	177 43 W.	26	5p, 25	27	997.8	W.	SW, 6	WNW.	W, 8	S-WSW.
Guide, U. S. C. & G. S.	Dutch Harbor	Seattle	54 54 N.	163 24 W.	26	2p, 27	27	982.7	SE.	S, 2	SE.	SE, 9	SSE-SW.
Azuma Maru, Jap. M. S.	Yokohama	San Francisco	47 12 N.	178 06 W.	27	Noon, 26	27	1,007.2		NW, 8	WNW.	NW, 8	
Discoverer, U. S. C. & G. S.	On survey work near.	Aleutian Islands.	54 30 N.	162 18 W.	26	2a, 28	27	988.2	SE.	SW, 4	SE.	SE, 10	

[1] August.
[2] Barometer uncorrected.
[3] Position approximate.

NORTH PACIFIC OCEAN, SEPTEMBER 1939

By WILLIS E. HURD

Atmospheric pressure.—On the average, a long, shallow LOW, pressure 1,008.0 to 1,010.3 millibars (29.77 to 29.83 inches), extended from the Gulf of Alaska across Aleutian waters and the southeastern part of the Bering Sea. The lowest daily pressure of the month at any of the island stations in this region was 979 millibars (28.91 inches), at Kodiak, on the 6th; the highest pressure was 1,032 millibars (30.48 inches), at St. Paul Island, in the Bering Sea, on the 15th. Throughout the Aleutian region the average barometer was higher than the normal, that at St. Paul, 1,010.3 millibars, being 4.2 millibars (0.12 inch) above. In middle latitudes, on the eastern half of the ocean, high pressure was strongly developed from the 1st to the 17th, but was thereafter broken by intruding LOWS. Here the average pressure was near normal. In the southwestern Tropics, following the extraordinarily depressed conditions of August, pressure had risen, and was for the most part above normal in September.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, September 1939, at selected stations*

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Millibars	*Millibars*	*Millibars*		*Millibars*	
Point Barrow	1,010.2	−2.3	1,023	22	995	16
Dutch Harbor	1,008.8	+1.0	1,029	15	981	27
St. Paul	1,010.3	+4.2	1,032	15	987	26
Kodiak	1,008.0	+1.9	1,023	10	979	6
Juneau	1,013.5	+0.3	1,030	23	990	15
Tatoosh Island	1,017.7	+0.8	1,026	18	1,006	12
San Francisco	1,013.9	0.0	1,022	14	1,005	25
Mazatlan	1,010.2	+0.4	1,013	3, 4, 24	1,006	27
Honolulu	1,014.8	−1.1	1,018	3	1,011	28
Midway Island	1,016.9	+0.6	1,023	4	1,009	11
Guam	1,009.4	−0.8	1,012	2, 6	1,004	18
Manila	1,009.3	+1.2	1,013	6	1,006	16
Hong Kong	1,009.1	+1.0	1,013	30	1,003	1
Naha	1,010.5	+2.7	1,016	24–25, 30	1,006	8
Titijima	1,011.7	+0.5	1,016	14–15, 25–26	1,006	10
Petropavlovsk [1]			1,020	18	999	24

[1] For 16 days.

NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.